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Perri Pitt Building Designer
ATTENTION: Perri Pitt
13 Epacris Court
Howden TAS 7054

26 April 2026

RE: 25 Cades Drive, Kingston (PID 5763621; C.T. 10337/17)

Proposed Development/Use – Extension to Dwelling and Outbuilding (DA-2026-81)

Preamble

Environmental Consulting Options Tasmania (ECO*tas*) has been engaged by Perri Pitt Building Designer (on behalf of their clients) to provide a natural values assessment of the private freehold title at 25 Cades Drive, Kingston (PID 5763621; C.T. 10337/17) proposed for development (extension to a single residential dwelling) to be considered under the provisions of the *Kingborough Interim Planning Scheme 2015*, now known as DA-2026-81, subject to a request for further information dated 17 Mar. 2026.

The present statement is intended to address the relevant provisions of the *Kingborough Interim Planning Scheme 2015*, with particular reference to the Biodiversity Code (and other matters raised in the request for further information, specifically matters related to "natural values", as follows:

3. Council's records indicate that there are trees on the subject site and it would appear that some of these trees may be impacted upon as a result of the proposed development.

   To verify the potential impact of the development on trees, determine whether any of these trees are of high conservation value or a priority species and demonstrate compliance with Clause 13.4.3 A1/P1 - Design, E10 (Biodiversity Code), and E14 (Scenic Landscape Code) please provide the following further information:

   (a) an amended site plan including an accurate tree plan and accompanying table of trees as per Section 1 of the attached guidelines for all trees within 15 m of the proposed development, and within any required hazard management area;

   (b) sufficient justification for impacts on or the removal of trees as per Section 2 and 4 of the attached guidelines; and

   (c) an arborist assessment where required as per Section 3 of the attached guidelines.

   For Advice: Where an arborist assessment is required and the arborist assessment recommends specific mitigation measures or changes to the design to minimise impacts and enable tree retention, amended plans must also be submitted incorporating the arborist recommendations.

4. The submitted Bushfire Hazard Report prepared by GES (December 2025) confirms that the proposal will impact in native vegetation (to the southwest of the existing dwelling) for the establishment of the extended bushfire hazard management area. Council's records indicate that the potential vegetation impacted is part of a native vegetation community. As the site is

subject to the Biodiversity Code (E10.0) of the Scheme, this impact must be assessed against clause E10.7.1 A1/P1. The information provided is insufficient to assess this impact.

To verify the potential impact of the extension of the bushfire hazard management area on native vegetation and priority biodiversity and demonstrate the proposal complies with Clauses 13.4.3 (design) A1/P1, and E10.7.1, please provide a Natural Values Determination by a suitably qualified ecological consultant. This assessment must include:

(a) an assessment of the environmental values potentially impacted by the extension of the bushfire hazard management area, including the type and extent of any native vegetation, fauna and flora values, individual trees, and threats to these values;

(b) classification of the significance of priority biodiversity values, with particular reference to Table E10.1 of the Scheme;

(c) an assessment of the anticipated impact on these values. The anticipated impact must consider impacts within the footprint of the proposed development as well as any associated impacts including bushfire hazard management area, existing and proposed activities on the site, and weeds, pests and pathogens. The assessment of the impact must identify the extent (m2 or hectares) of any native vegetation being removed or modified, loss of threatened species and their habitat, bird collision risk and details of individual trees proposed for retention and removal;

(d) recommendations for the mitigation, management and offsetting of any residual impacts; and

(e) a revised site plan or map demonstrating the above information, with detail regarding native vegetation to be removed and retained, including individual trees, consistent with the Tree Plan required under Item 3.

Zoning and overlays

At present, the title (Figures 1-3) is zoned as Rural Living (Figure 4) pursuant to the *Kingborough Interim Planning Scheme 2015*. It is wholly subject to the Biodiversity Protection Area (BPA) overlay (Figure 5a) and the Scenic Protection Area overlay (Figure 5b). Notably, the *Local Provisions Schedule – Kingborough* effectively excludes the powerline easement that dissects the title but does not exclude the other developed parts of the title such as the long-existing house and surrounds (Figure 5c).

Land use proposal

The proposal is for an extension to an existing single residential dwelling, which therefore triggers the need for a bushfire hazard management plan with associated hazard management area, at least in relation to the relevant part of the dwelling. A BAL-19 hazard management area (HMA) is proposed, noting that no works to the existing driveway and other parts of the access are required.

Assessment

Database checks

LISTmap was examined to determined existing vegetation mapping and known sites for threatened flora and fauna. Database reports were produced under DNRET's *Natural Values Atlas* (DNRET 2026), the Forest Practices Authority's *Biodiversity Values Database* (FPA 2026) and the Commonwealth *Protected Matters Report* (CofA 2026) to support the assessment process (all appended for reference).

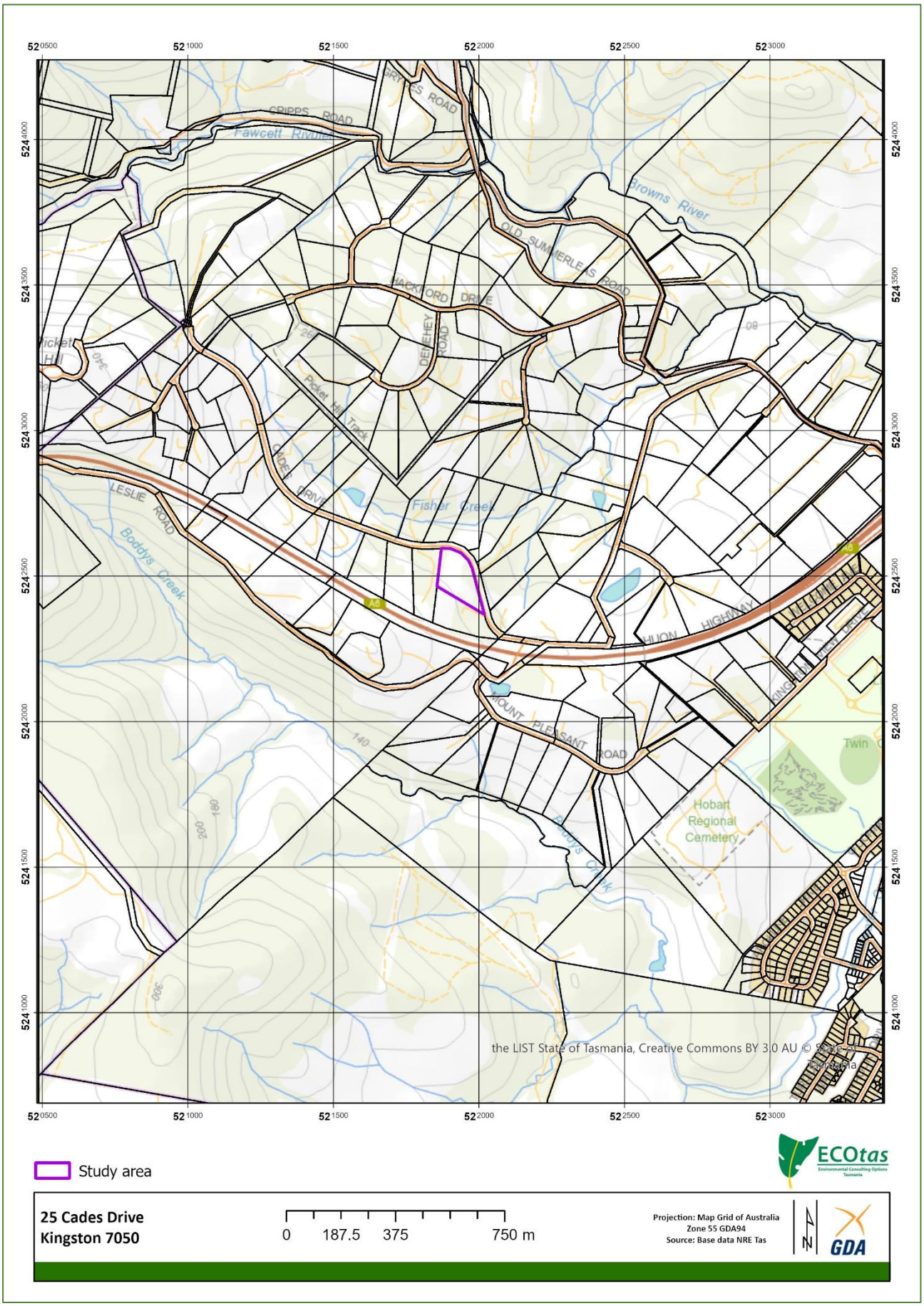


Figure 1. General location of subject title

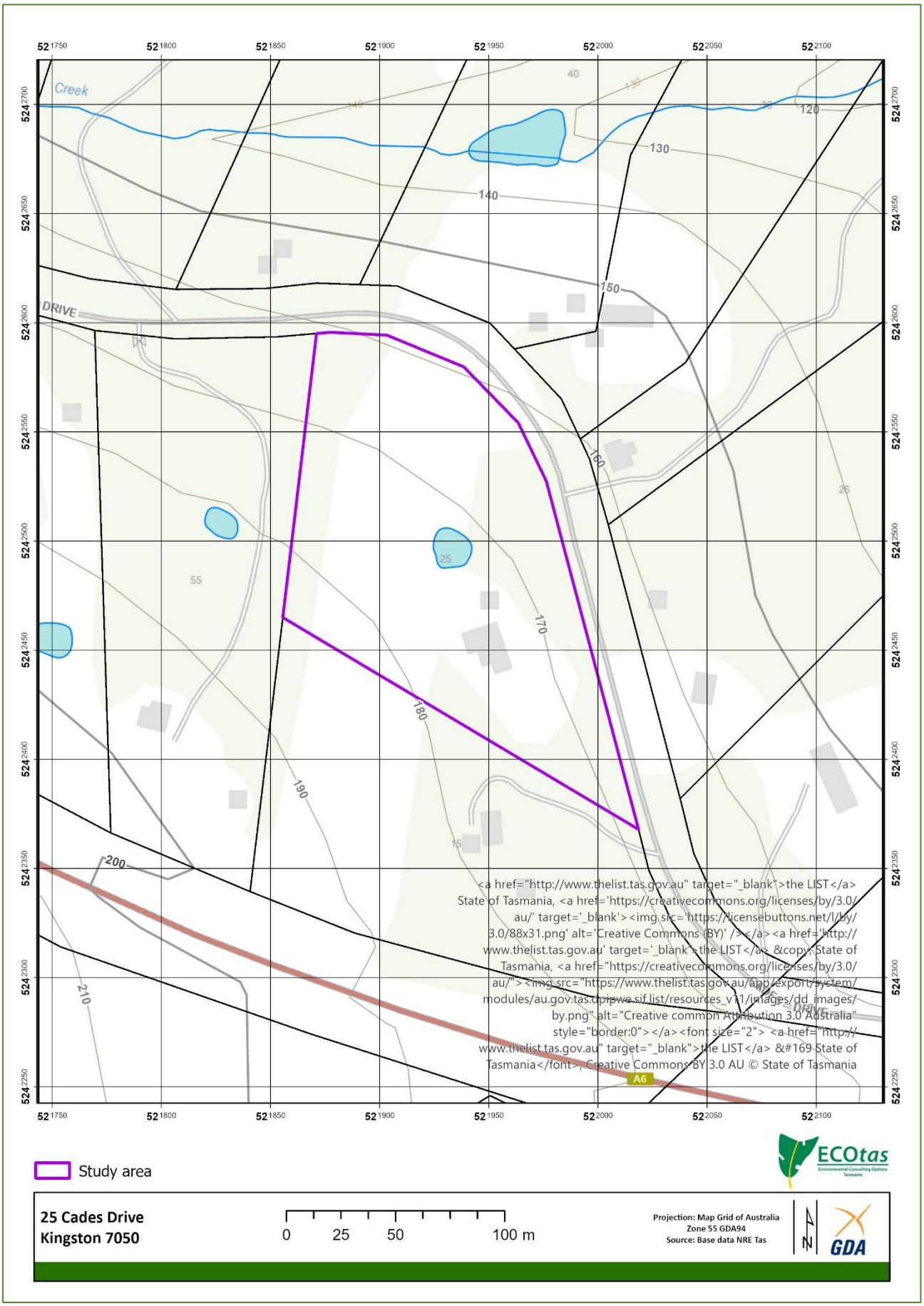


Figure 2. Detailed location of subject title

Figure 3. Detailed location of subject title showing recent aerial imagery

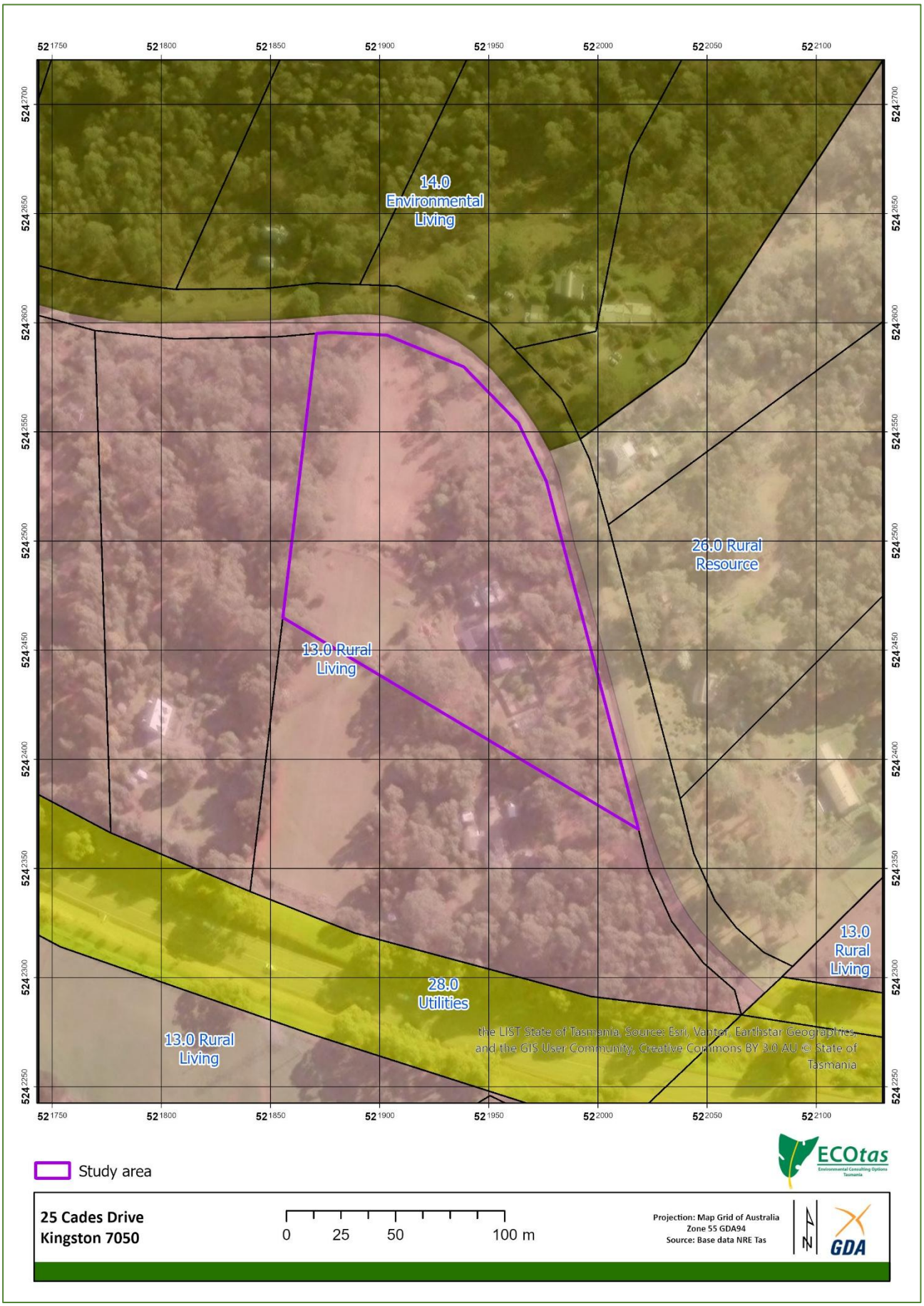


Figure 4. Current zoning of subject title pursuant to *Kingborough Interim Planning Scheme 2015*

Figure 5a. Current extent of Biodiversity Protection Area within and surrounding subject title pursuant to *Kingborough Interim Planning Scheme 2015*

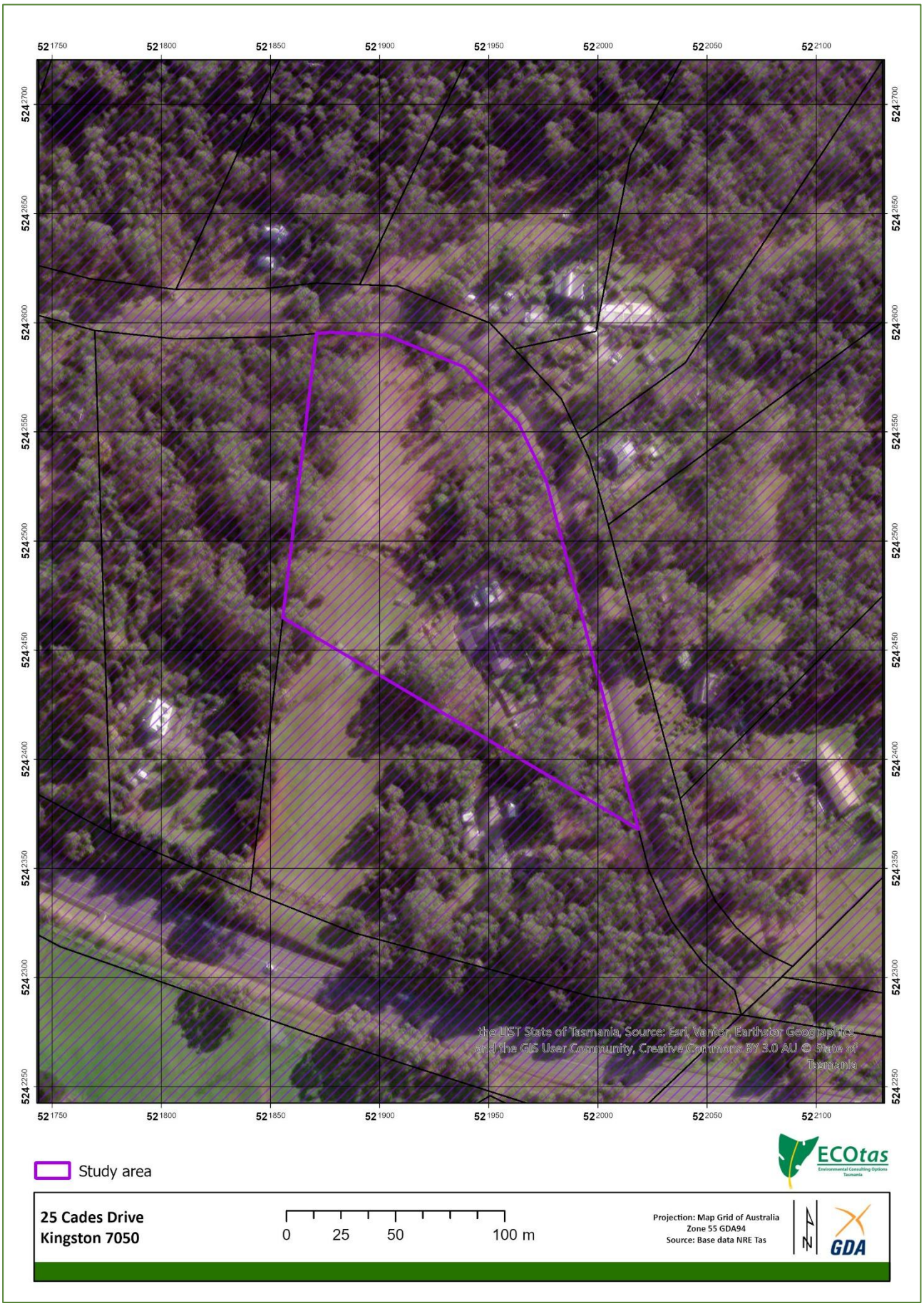


Figure 5b. Current extent of Scenic Protection Area within and surrounding subject title pursuant to *Kingborough Interim Planning Scheme 2015*

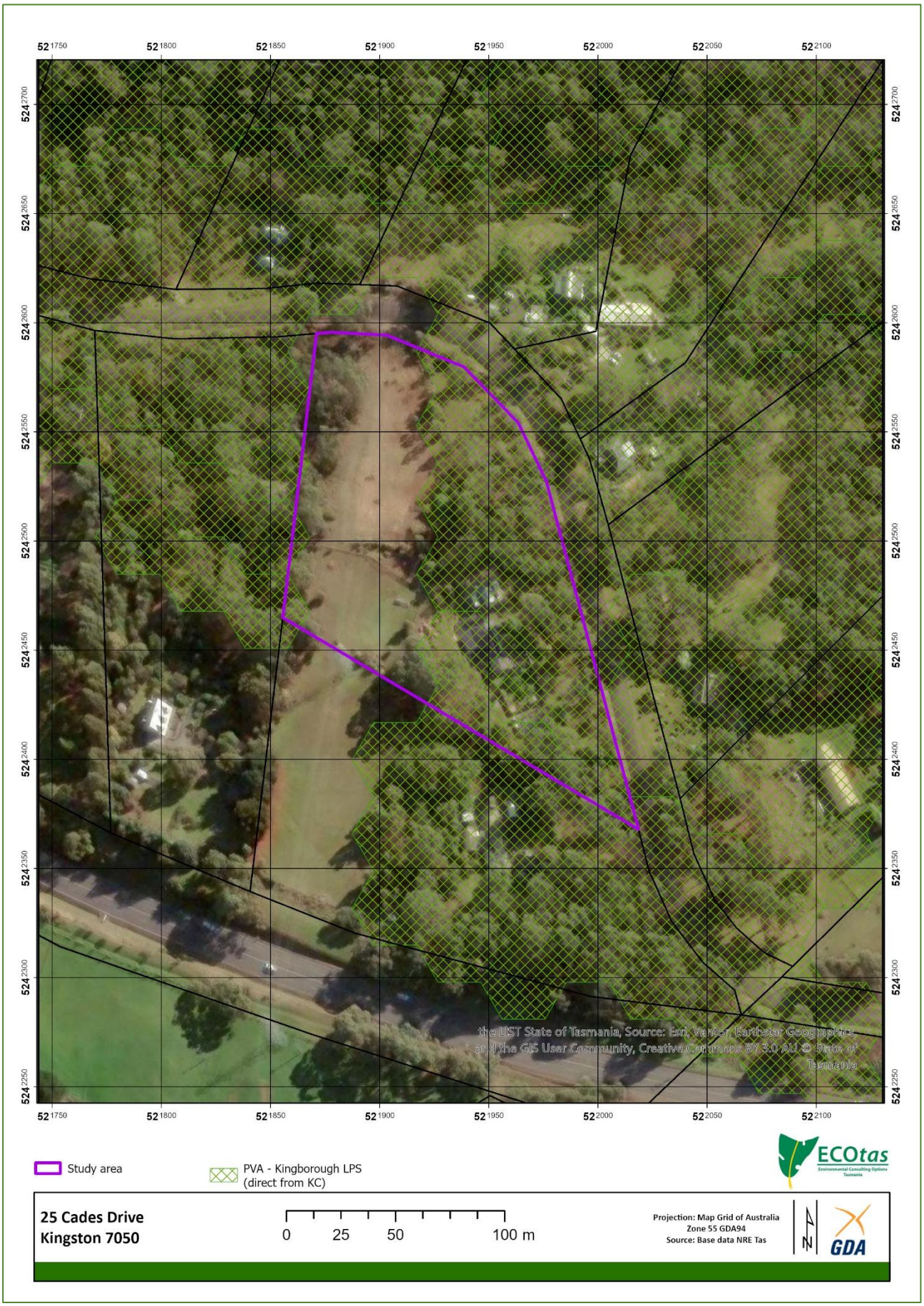


Figure 5c. Proposed extent of Priority Vegetation Area overlay within and surrounding subject title pursuant to proposed *Local Provisions Schedule – Kingborough*

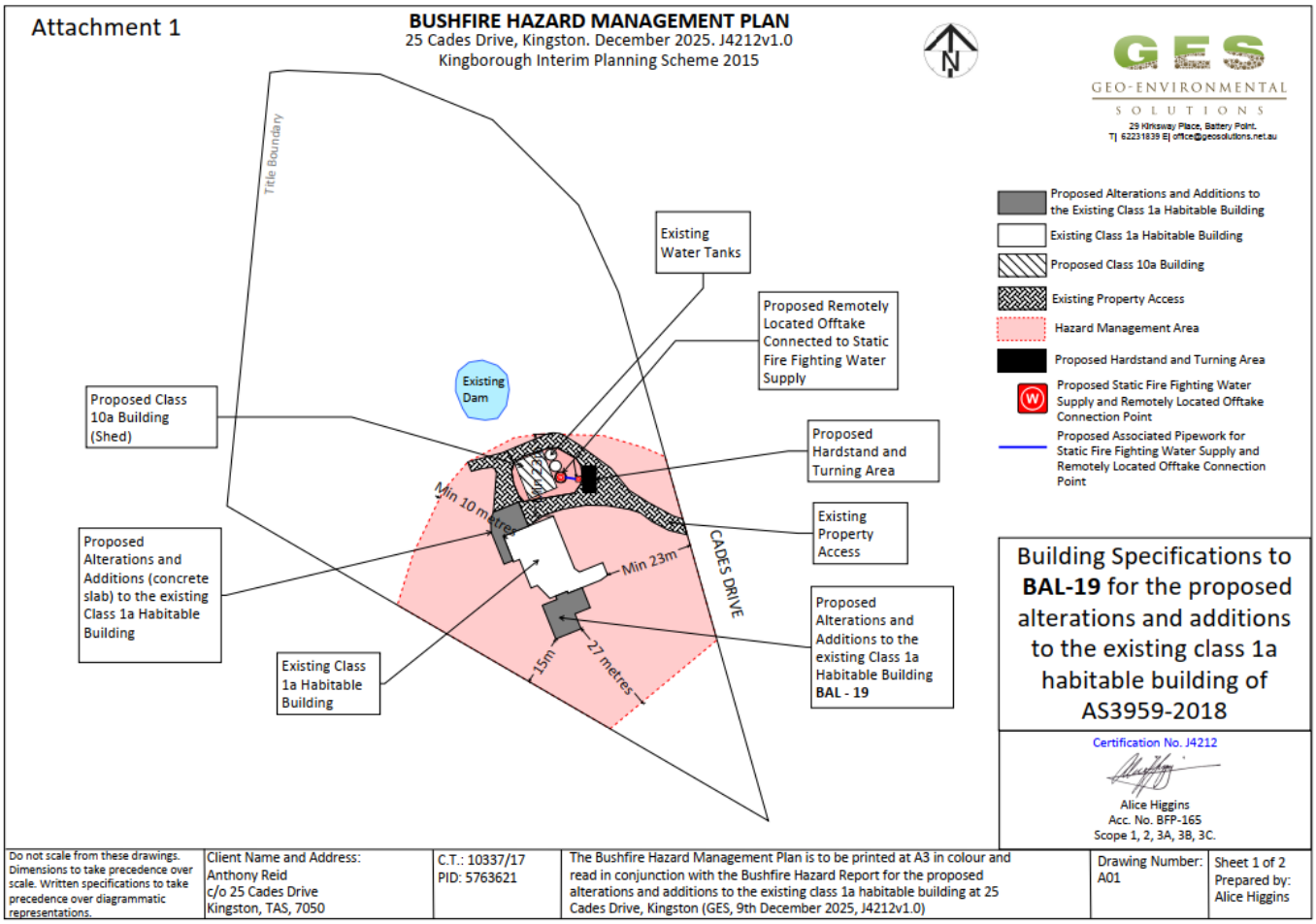


Figure 6. Site plan showing relative location of project elements including access and extent of proposed HMA [source: Geo-Environmental Solutions 2025, included for indicative purposes only]

Assessment continued…

Site assessment

The site was attended by Mark & James Wapstra (ECOtas) on 10 Apr. 2026. The assessment included walking the whole of the title including all boundaries, and characterising individual trees within and close to the indicative hazard management area. Trees were identified to species and measured using a diameter tape (to nearest centimetre, measured at ca. 1.3-1.4 m above natural ground level) with the algorithm to calculate the DBHOB of a multi-stemmed tree aligned with the Australian Standard for Protection of Trees on Development Sites AS4970-2025 (https://www.treetec.net.au/tree-arborist-victoria/tpz_srz_dbh_calculator/) applied.

All trees were identified to species-level. In this case, the identification of trees is critical because of the application of the Kingborough Council's *Guidelines for a Tree Plan* v2.1 05/04/2024 and *Kingborough Biodiversity Offset Policy 6.10, Nov. 2023*. Most relevant to the present site is the classification of gum-barked (smooth-barked) species. While Eucalyptus pulchella (white peppermint) is distinctive, identifying members of the *Eucalyptus viminalis* series is more challenging. This is based almost wholly on the morphology (shape), arrangement (degree of stem clasping) and colour of juvenile leaves (i.e. leaves on seedlings – avoiding intermediate forms if possible, coppice growth or epicormic growth. Unfortunately, this form of evidence is often not available and a "population picture" must be established by examining as much juvenile material as possible in the wider area.

Findings

Overview

The site is on a generally north easterly-facing slope between ca. 160-185 m a.s.l. The site is developed on Jurassic dolerite and dolerite-derived soils as well as Permian mudstone and mudstone-derived soils. The title is fully fenced.

The whole title has been subject to a long period of various forms of disturbance. A wide powerline clearing dissects the title (Plates 1 & 2) – it is understood that the formal easement extends much further east than the current extent of clearing (A. Reid pers. comm.). There is a fringe of disturbed forest along the title's western boundary – not considered further here because wholly outside the proposed development footprint. There is a small area of native vegetation north of the access (fenced) – again, not considered further as the fence marks the practical intended limit of the hazard management area. To the east of the proposed hazard management area, there is a small triangle of "native vegetation" – also not proposed for any impact. The loosely "forested" areas are clearly indicated in Tree Canopy Modelling (Figure 7).

Plates 1 & 2. Looking south (LHS) and north (RHS) along the powerline clearing

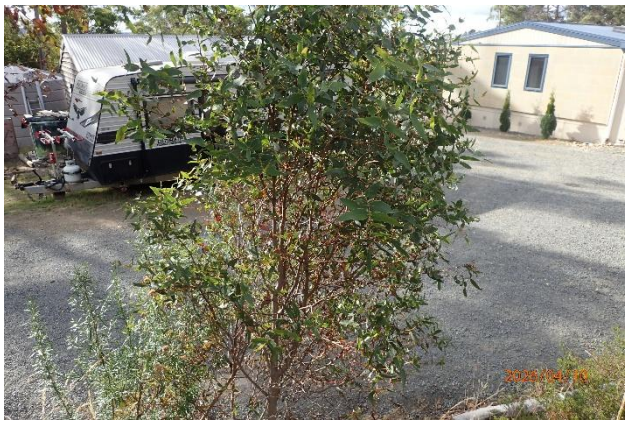
There is an existing well-formed access drive off Cades Drive (Plates 3 & 4) that leads to two sheds and gravelled parking areas (Plates 4 & 5) adjacent to the residential dwelling, around which is extensively modified, once wholly cleared and now supporting naturally regenerated trees and naturalised species amongst what is best described as a typical "rural living"-style "backyard" (Plates 7-12).

Plates 3 & 4. Existing well-formed access off Cades Road


Plates 5 & 6. Access, sheds and parking areas near dwelling





Plates 7-12. Views of existing dwelling and surrounds

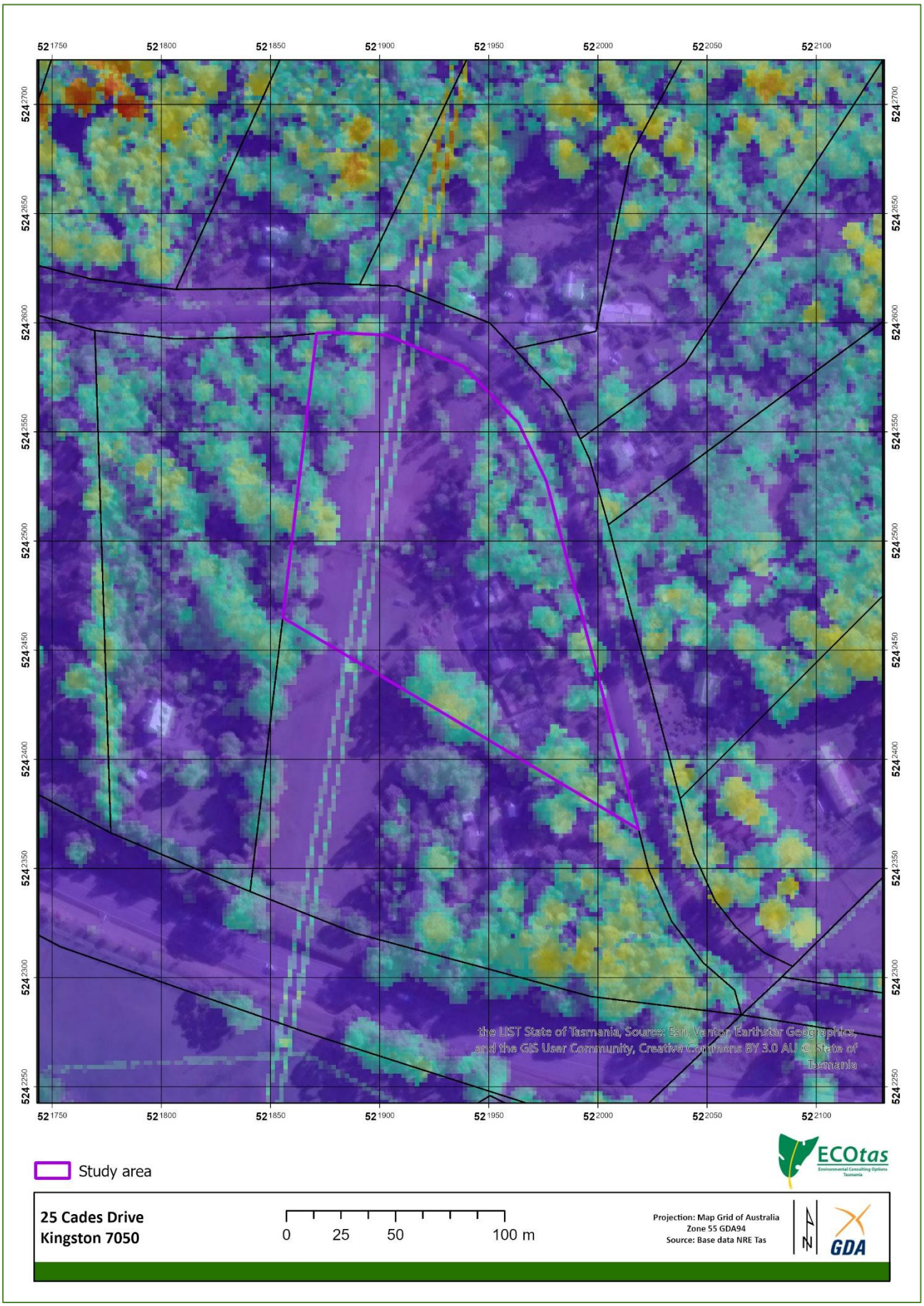


Figure 7. Tree canopy modelling for subject title and surrounds

Findings continued…

Vegetation types

Existing TASVEG mapping is unhelpful in providing much useful indication on the appropriate classification of the site. TASVEG 3.0 & 4.0, 5.0 and LIVE (Figures 8 & 9) map most of the title and broader surrounds as a combination of extra-urban miscellaneous (TASVEG code: FUM) and *Eucalyptus pulchella* forest and woodland (TASVEG code: DPU). DPU is mapped across the eastern side of title and a small section of the western side, while FUM dissects the western portion of title under TASVEG 3.0, with 4.0, 5.0 & LIVE being updated to accommodate the residential part of the title.

The correct classification of the powerline clearing is permanent easements (TASVEG code: FPE), which is now reflected in the updated vegetation mapping (Figure 10). The residentially-developed and associated modified parts of the title are best classified as either extra-urban miscellaneous (TASVEG code: FUM) or urban areas (TASVEG code: FUR). Recent and current iterations of TASVEG tend to favour FUM for "rural" settings and FUR for peri-urban settings – either could be chosen in this case: I have elected to map it as FUR to reflect the high level of development and management as a reasonably typical "urban yard". The limits of FPE are "easy", effectively a straight line defined by managed clearance. The limits of FUR are somewhat more nebulous Note that the area of FUR & FPE includes a small dam. The limits of the forest "proper" are well indicated by a combination of on-ground observation of features such as fences, drives, cleared areas, etc. and by reference to aerial imagery, tree canopy modelling and Hillshade mapping. The result of this mapping is that the proposed hazard management area is wholly classified as a form of modified land (i.e. as F-coded mapping units – mainly FUR but also a small area of FPE).

Due to the high levels of modification, classifying the remnant patches of forest on the title is challenging because they mainly represent natural regeneration after clearing, meaning the localised canopy dominance has probably been shifted. Throughout, however, there is a mix of species including *Eucalyptus pulchella* (white peppermint), *Eucalyptus obliqua* (stringybark) and *Eucalyptus dalrympleana* (mountain white gum) and [perhaps some *Eucalyptus viminalis* (white gum). For the record, none of the *Eucalyptus* material (adult or juvenile) is a "good" match for *Eucalyptus rubida* (candlebark). This is mentioned because Kingborough Council commissioned a report on the distribution and conservation status of this "priority species" (Enviro-dynamics 2019), which reported on a population in the Leslie Vale area. The understorey is variable but generally shrubby (in less disturbed areas). Somewhat for convenience, but also reflecting the variation in the canopy and the vegetation in adjacent areas, the remnant forested parts of the title are retained as DPU. This is most acceptable for the patch north of the drive, which is developed on Jurassic dolerite, typical for DPU, and probably also applies to most probably all) of the western fringe. The small corner in the southeast, apart from perhaps being better subsumed into a lot-level concept of FUR (as is now very often applied through the latest versions of TASVEG) could be better mapped as a different community because DPU rarely occurs on non-dolerite substrates ("rarely" but in the greater Kingborough-Hobart area, sites are well-known in the Water Works – on sandstone – and Nierinna Road at Margate – on mudstone, such that classification as DPU is quite acceptable). Alternative mapping units are not "simply" applied because of the species composition, which is heavily influenced by land use history.

Occurrences of FPE, FUR & DPU do not equate to a native vegetation community listed as threatened on Schedule 3A of the Tasmanian *Nature Conservation Act 2002* or to a threatened ecological community listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*.

Occurrences of FPE, FUR & DPU do not qualify as any particular priority biodiversity value (as vegetation communities) under Table E10.1 of the Biodiversity Code of the *Kingborough Interim Planning Scheme 2015*.

It is reiterated that the whole of the proposed development area is best classified as an F-coded mapping unit.

Figure 8. Existing TASVEG 3.0 mapping for subject title and surrounds (refer to text for codes)

Figure 9. Existing TASVEG 4.0, 5.0/Live mapping for subject title and surrounds (refer to text for codes)

Figure 10a. Revised vegetation mapping for subject title (refer to text for codes)

Figure 10b. Revised vegetation mapping for subject title showing extent of proposed hazard management area (refer to text for codes)

Figure 12. Distribution of records of threatened flora (overview)

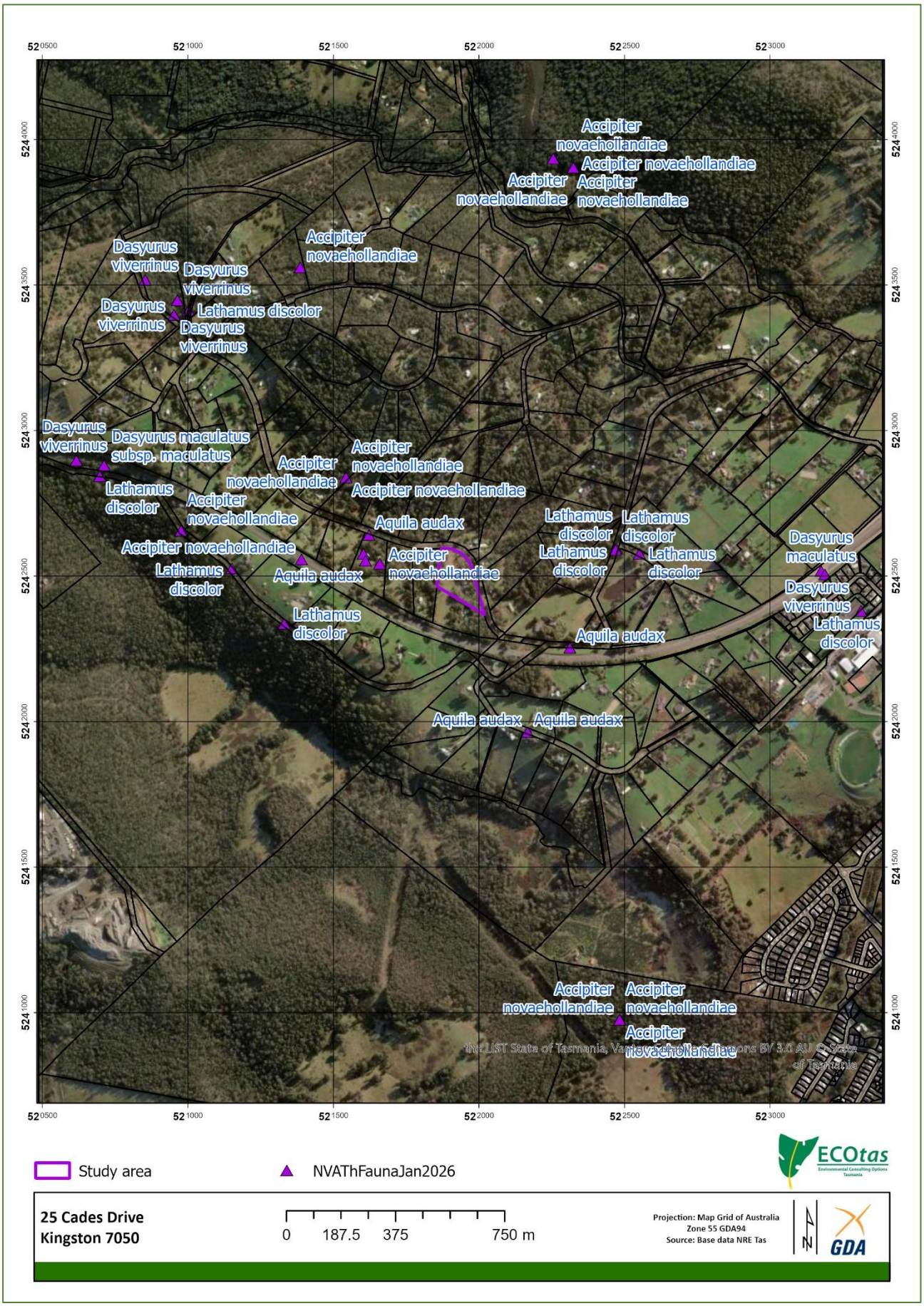


Figure 12. Distribution of records of threatened fauna (overview)

Findings continued…

Threatened flora

No plant species listed as threatened on the Tasmanian *Threatened Species Protection Act 1995* and/or the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* are known from database information (Figure 11), or were detected as a consequence of field assessment, from the study area.

In the absence of populations of threatened flora and potential habitat of such species (except in the most general of senses), the site does not qualify as any particular priority biodiversity value (in relation to threatened flora) under Table E10.1 of the Biodiversity Code of the *Kingborough Interim Planning Scheme 2015*.

Threatened fauna

No fauna species listed as threatened on the Tasmanian *Threatened Species Protection Act 1995* and/or the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* are known from database information (Figure 12), or were detected as a consequence of field assessment, from the project area.

In the absence of populations of threatened fauna, the site should not qualify as any particular priority biodiversity value (in relation to threatened fauna) under Table E10.1 of the Biodiversity Code of the *Kingborough Interim Planning Scheme 2015*. However, it is recognised that Table E10.1 includes the concept of "potential habitat".

The fact that cleared habitats with some weed and native elements provide potential habitat for species such as *Perameles gunnii* (eastern barred bandicoot) is not considered significant, with particular reference to the phrasing of the definition of potential habitat under the Biodiversity Code, viz. "it may not include habitats known to be occupied intermittently".

The site does not include any particular tree species that have a strong association with species of threatened fauna. Specifically, no individuals of *Eucalyptus globulus* (blue gum) or *Eucalyptus ovata* (black gum), which would usually be considered to be potential habitat for *Lathamus discolor* (swift parrot), were identified. *Eucalyptus viminalis* (white gum) is usually associated with potential habitat for the forty-spotted pardalote (*Pardalotus quadragintus*). In this case, it is somewhat tenuous that the "white gums" on the site are *Eucalyptus viminalis*, with much closer affinities to *Eucalyptus dalrympleana*, which has never been formally associated with the forty-spotted pardalote. Refer to section on Individual trees for more details on this matter.

Other natural values

Table E10.1 of the Biodiversity Code of the *Kingborough Interim Planning Scheme 2015* also includes other values that can be considered as moderate or high priority biodiversity value. The main one in relation to this site is the concept of "high conservation value trees". In this case, a detailed site survey has been undertaken and a plan produced (Figure 13, Table 1) showing all trees greater than ca. 25 cm DBH within the hazard management area, which effectively delineates the extent of any possible works. This plan has been produced to satisfy Kingborough Council's *Guidelines for a Tree Plan* v2.1 05/04/2024, *Kingborough Biodiversity Offset Policy 6.10, Nov. 2023* and the *Australian Standard for Protection of Trees on Development Sites AS4970-2026* (should the latter become required).

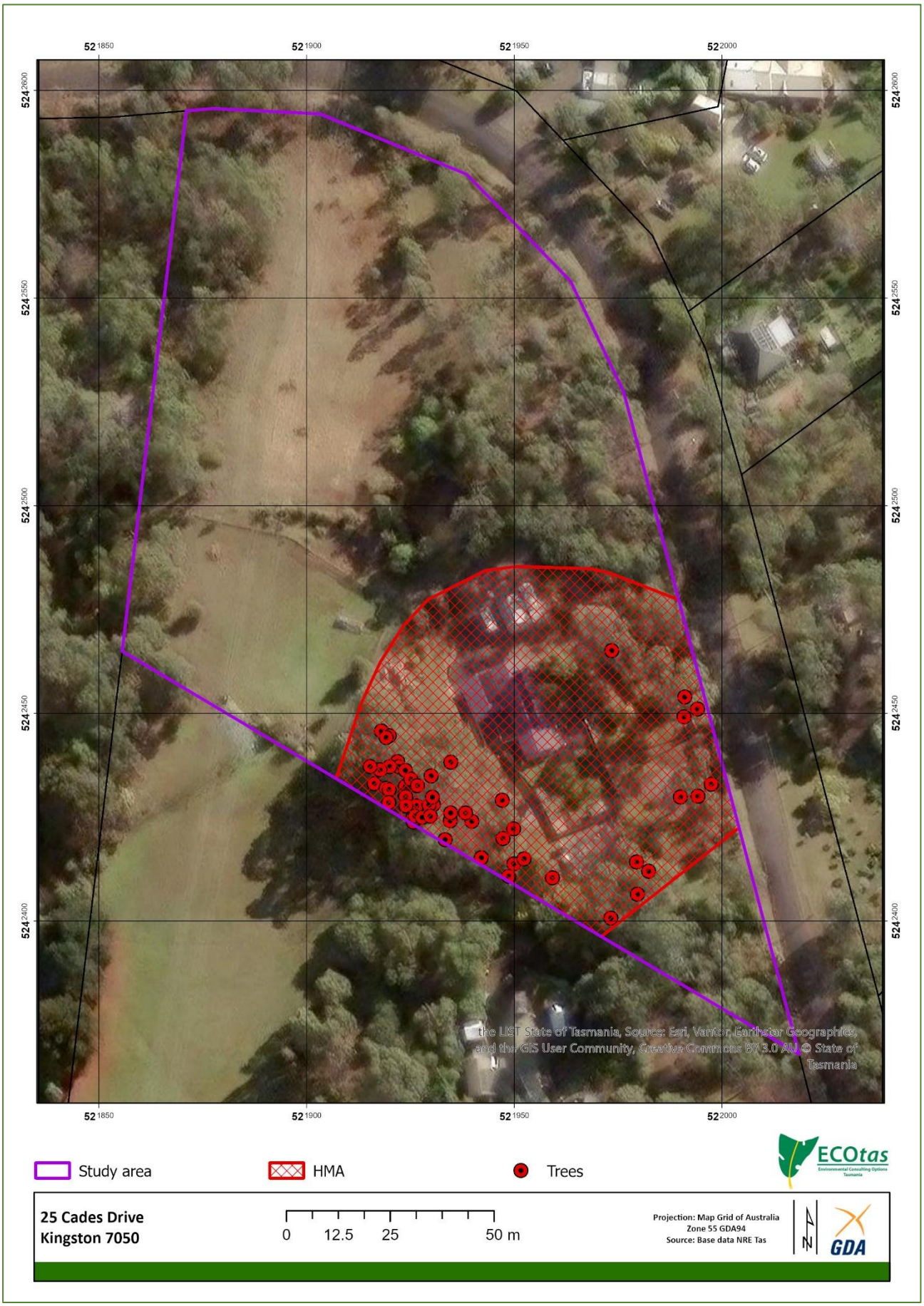


Figure 13a. Location of all trees over ca. 25 cm DBH [cross-reference to Table 1] within proposed hazard management area: overview

Figure 13a. Location of all trees over ca. 25 cm DBH [cross-reference to Table 1] within proposed hazard management area: detail

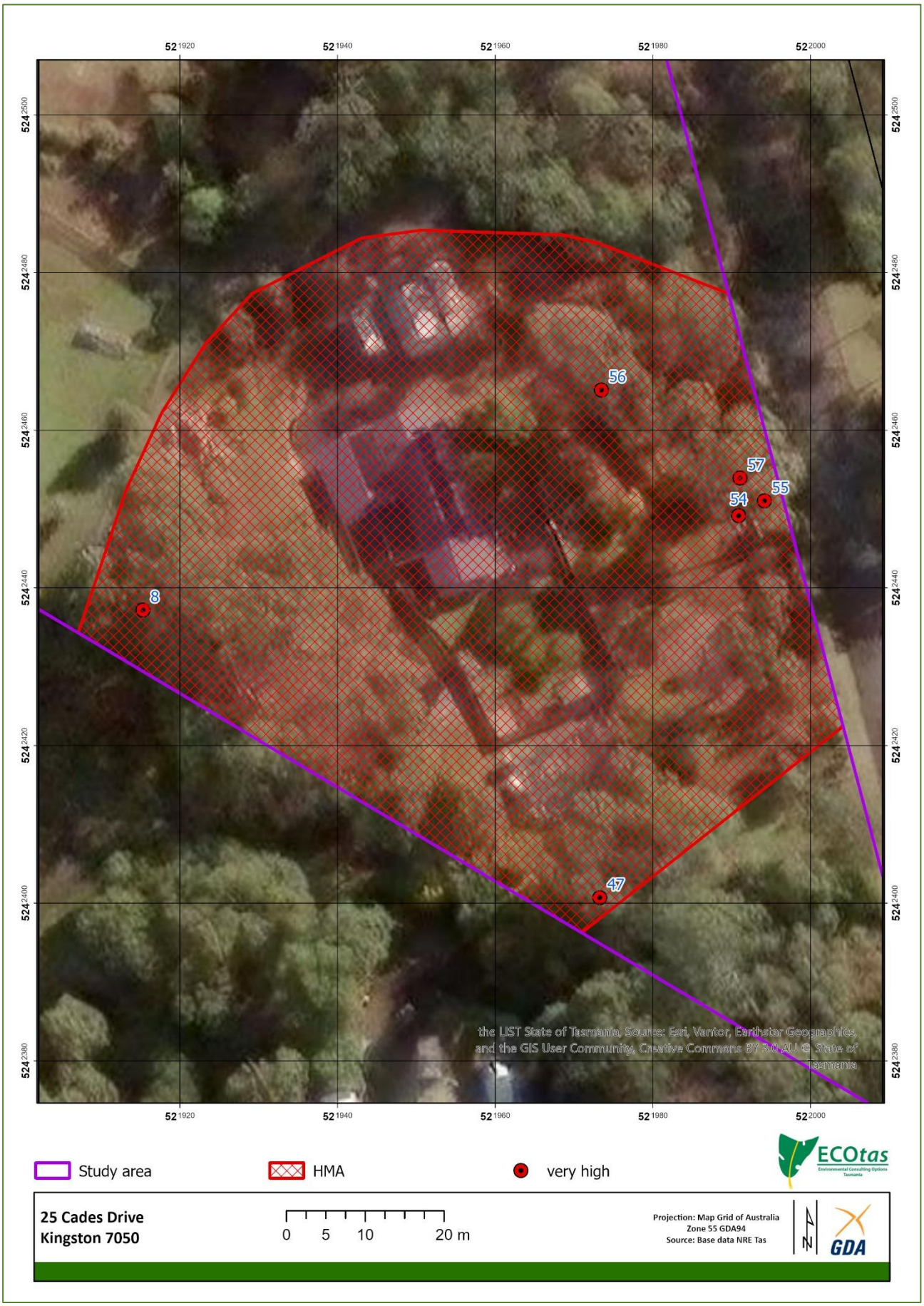


Figure 13c. Location of very high conservation value trees [cross-reference to Table 1] within proposed hazard management area

Figure 13d. Location of sampled juvenile, coppice and epicormic material of individuals of "dal-vim" [cross-reference to Appendix A]

Table 1. Details of all characterised trees [cross-reference to Figure 13]

[DBH = diameter at breast height (i.e. 1.3-1.4 m above ground), multiple trunked trees corrected by reference to https://www.treetec.net.au/tree-arborist-victoria/tpz_srz_dbh_calculator/ aligned with AS4970-2009; CV = conservation value as per *Kingborough Biodiversity Offset Policy 6.10, November 2023*; rows in bold highlight trees with high or very high conservation value; TPZ = 12 x DBH; E. obl = *Eucalyptus obliqua* (stringybark), E. pul = *Eucalyptus pulchella* (white peppermint), E. dal-vim = *Eucalyptus dalrympleana* (mountain white gum) with variable affinities to *Eucalyptus viminalis* (white gum), E. cup = *Exocarpos cupressiformis* (native cherry); those marked with # are within 2 m of a boundary fence

tree	species	DBH (cm)	DBH (corrected, cm)	CV	rationale	TPZ (m)
1	E. dal-vim	41, 53	67	low	modified context, any species DBH <70 cm	8.04
2	E. dal-vim		63	low	modified context, any species DBH <70 cm	7.56
3	E. dal-vim		25	low	modified context, any species DBH <70 cm	3
4	E. dal-vim		40	low	modified context, any species DBH <70 cm	4.8
5	E. dal-vim		16	low	modified context, any species DBH <70 cm	1.92
6	E. dal-vim		9	low	modified context, any species DBH <70 cm	1.08
7	E. dal-vim	12, 40	42	low	modified context, any species DBH <70 cm	5.04
8 #	**E. dal-vim**	**69, 43**	**81**	**very high**	**modified context, any species DBH >70 cm**	**9.72**
9 #	E. dal-vim		24	low	modified context, any species DBH <70 cm	2.88
10 #	E. dal-vim		21	low	modified context, any species DBH <70 cm	2.52
11	E. dal-vim		26	low	modified context, any species DBH <70 cm	3.12
12	E. dal-vim		27	low	modified context, any species DBH <70 cm	3.24
13	E. obl		19	low	modified context, any species DBH <70 cm	2.28
14	E. obl		32	low	modified context, any species DBH <70 cm	3.84
15	E. obl		33	low	modified context, any species DBH <70 cm	3.96
16	E. obl		19	low	modified context, any species DBH <70 cm	2.28
17	E. obl		48	low	modified context, any species DBH <70 cm	5.76
18	E. obl		63	low	modified context, any species DBH <70 cm	7.56
19	E. dal-vim		13	low	modified context, any species DBH <70 cm	1.56
20 #	E. dal-vim		26	low	modified context, any species DBH <70 cm	3.12
21	E. obl		38	low	modified context, any species DBH <70 cm	4.56
22	E. dal-vim		12	low	modified context, any species DBH <70 cm	1.44

tree	species	DBH (cm)	DBH (corrected, cm)	CV	rationale	TPZ (m)
23 #	E. dal-vim		65	low	modified context, any species DBH <70 cm	7.8
24 #	E. dal-vim		24	low	modified context, any species DBH <70 cm	2.88
25	E. obl		52	low	modified context, any species DBH <70 cm	6.24
26 #	E. dal-vim		30	low	modified context, any species DBH <70 cm	3.6
27#	E. dal-vim		43	low	modified context, any species DBH <70 cm	5.16
28	E. obl		56	low	modified context, any species DBH <70 cm	6.72
29	E. obl		32	low	modified context, any species DBH <70 cm	3.84
30	E. dal-vim		38	low	modified context, any species DBH <70 cm	4.56
31 #	E. dal-vim		51	low	modified context, any species DBH <70 cm	6.12
32	E. dal-vim		56	low	modified context, any species DBH <70 cm	6.72
33	E. dal-vim		22	low	modified context, any species DBH <70 cm	2.64
34	E. dal-vim		38	low	modified context, any species DBH <70 cm	4.56
35	E. dal-vim		31	low	modified context, any species DBH <70 cm	3.72
36	dead		32	low	dead (no hollows; ex-E. obl)	3.84
37	E. dal-vim	51, 36, 29	69	low	modified context, any species DBH <70 cm	8.28
38	E. dal-vim		30	low	modified context, any species DBH <70 cm	3.6
39	E. pul		52	low	modified context, any species DBH <70 cm	6.24
40	E. pul		23	low	modified context, any species DBH <70 cm	2.76
41	E. obl		44	low	modified context, any species DBH <70 cm	5.28
42	E. dal-vim	36, 15, 16	42	low	modified context, any species DBH <70 cm	5.04
43	E. dal-vim		20	low	modified context, any species DBH <70 cm	2.4
44 #	E. dal-vim		19	low	modified context, any species DBH <70 cm	2.28
45	E. cup		30	low	modified context, any species DBH <70 cm	3.6
46	E. dal-vim		43	low	modified context, any species DBH <70 cm	5.16
47 #	**E. dal-vim**	**62, 53**	**82**	**very high**	**modified context, any species DBH >70 cm**	**9.84**

tree	species	DBH (cm)	DBH (corrected, cm)	CV	rationale	TPZ (m)
48	E. dal-vim		36	low	modified context, any species DBH <70 cm	4.32
49	E. obl		33	low	modified context, any species DBH <70 cm	3.96
50	E. obl		31	low	modified context, any species DBH <70 cm	3.72
51	dead		76	low	dead (no hollows; ex-E. dal-vim)	9.12
52	E. obl		46	low	modified context, any species DBH <70 cm	5.52
53	E. dal-vim		31	low	modified context, any species DBH <70 cm	3.72
54	**E. dal-vim**		**79**	**very high**	**modified context, any species DBH >70 cm**	**9.48**
55	**E. dal-vim**		**78**	**very high**	**modified context, any species DBH >70 cm**	**9.36**
56	**E. dal-vim**		**93**	**very high**	**modified context, any species DBH >70 cm**	**11.16**
57	**E. dal-vim**		**95**	**very high**	**modified context, any species DBH >70 cm**	**11.4**

Some further explanation of the concept of the trees identified as "E. dal-vim" is warranted. As stated previously, I have no hesitation in indicating that none of the "white gums" are *Eucalyptus rubida* (candlebark). However, assignation as either *E. viminalis* or *E. dalrympleana* is more challenging and has implications under the relevant council policies. In Tasmania, the two species form an altitudinal cline and can also hybridise (Williams et al. 1996). Typically, *E. viminalis* is a more lowland species and *E. dalrympleana* a more highland species: below say 300 m a.sl., almost all "white gum" is *E. viminalis*; above say 600 m a.s.l., most is *E. dalrympleana*; between 300-600 m is the often difficult zone of material having affinities to either species, sometimes very clearly able to be allocated one way or another, sometimes far less so. This "ruleset" gets blurred in some parts of the State, often on fertile substrates such as dolerite, where "cold air drainage" allows the more cold-tolerant *E. dalrympleana* to extend to lower elevations. This title is at a lower elevation (below ca. 200 m a.s.l.) but receives cold air drainage from Kunanyi and is on a broad flat that would be frost-prone. Prior to the conservation status of forests dominated by "white gum" being a particular concern under legislation, it was not unusual for field botanists to record clinal forms of "white gum" simply as "vim-dal" (or "dal-vim"). In this case, this luxury of "not worrying about" the identity of the "white gums" on the site is not available because any individual of *Eucalyptus viminalis* with a DBH over 25 cm could qualify as a high or very high conservation value tree because of its association with the forty-spotted pardalote. In this case, for this site, individuals allocated to *E. viminalis* would only possibly qualify as high conservation value because the site is "within 5,000 m of significant forty-spotted pardalote habitat or within potential forty-spotted pardalote habitat" (the nearest "significant habitat" being along Coffee Creek ca. 3-4 km away).

To best determine the identity of "white gums", I have taken a "population picture" approach by examining as many seedlings, coppicing lignotubers, epicormic budding material and pre-intermediate stage individuals within and close to the hazard management area. I waypointed the location of the examined individuals, took digital images and allocated the material to *Eucalyptus viminalis*, *Eucalyptus dalrympleana* or a clinal form. A total of 23 individuals were examined, mapped (Figure 13) and photographed (refer to Appendix 1 for annotated images): only 4 were assignable to *E. viminalis* "proper" (almost all very small seedlings where the later form of leaves is not well-established but allocated because of the brighter green and narrow-lanceolate leaves with little overlap with the stem), 11 to *E. dalrympleana* (with a high degree of confidence based on the grey-green leaves with a broad-lanceolate to almost ovate shape

and some degree of overlap with the stem), and 8 to a "dal-vim" clinal form (and closer to *E. dalrympleana* than *E. viminalis*). On this basis, I assign the "white gums" of this site more confidently to *E. dalrympleana* than *E. viminalis*.

The result of this classification is that only 6 of the 57 classified trees qualify as very high conservation value (Table 1, Figure 13) on the basis of their girth (over 70 cm DBH in a modified setting). It is noted that none currently possess hollows, their girth almost certainly a result of having developed their canopies and primary trunks relatively free of competition (because of the previous clearing history of the site) or because they are remnants after such clearing and allowed to grow on.

These very high conservation value trees qualify as moderate priority biodiversity value under Tabel E10.1 of the Biodiversity Code and will therefore be subject to the *Kingborough Biodiversity Offset Policy 6.10, Nov. 2023*, if "significant justification" can be provided for their removal (e.g. by an assessment by a suitably qualified arborist or due to unavoidable loss to implement the construction and/or hazard management area). It is acknowledged that the client wishes to retain some of the trees – these can be shown on a plan (it is understood that these are adjacent to the drive where no works are proposed so should not require assessment by a suitably qualified arborist). Further to the management of the characterised trees, however, is that several are located within 2 m of the existing boundary fence and therefore may be subject to some form of exemption (see further below).

Consideration of Biodiversity Code provisions

The application of the Biodiversity Code is stated as:

> E10.2 Application
>
> E10.2.1 This code applies to development involving clearance and conversion or disturbance of native vegetation within a Biodiversity Protection Area.

That the site is within a Biodiversity Protection Area is not under question. That the site supports "native vegetation", however, is a tenuous claim at best. The *Scheme* defines "native vegetation" to mean "plants that are indigenous to Tasmania including trees, shrubs, herbs and grasses that have not been planted for domestic or commercial purposes". This is an almost all-encompassing definition and means that sites that are not domestic gardens, commercial wood plantations, crops or very clearly intensively-managed pasture grass are all "native vegetation". Technically, this would include most road verges with scattered trees, shrubs and native grasses, but it could also be extended to "rough pasture" i.e. sites clearly used for primary production such as cropping, grazing, hay-making, etc. but that periodically revert to disused land and some native plant species occurring once again (most notably some native grasses, herbs like buzzies, a scattered teatree or wattle seedling, perhaps a patch of bracken). In my opinion, it is very challenging to properly assign an area now mapped as urban areas (TASVEG code: FUR) under TASVEG as "native vegetation" – if this were the approach adopted, suburban yards would then become "native vegetation" – it seems very unlikely this was ever the intent of the definition. [As an aside, this definition of "native vegetation" was in most interim schemes and has been transferred to the *State Planning Provisions*. It creates a nonsensical situation in some municipalities where a farmer ploughing a paddock may technically need a permit. There is no conceivable manner in which this could have been the intent of the definition. Now that we have TASVEG classifications, there is no reason that the definition should not be modified].

The Statewide vegetation mapping system deals with modified sites under the super-category of "modified land" that includes the following relevant mapping units: agricultural land (FAL), regenerating cleared land (FRG), extra-urban miscellaneous (FUM), weed infestation (FWU), permanent easements (FPE), *Pteridium esculentum* (bracken) fernland (FPF) and urban areas (FUR). There is no doubt that the proposed development site at 25 Cades Drive is wholly on land that has been classified as FUR (and just extending into an area mapped as FPE).

In no reasonable classification of vegetation should the present site be regarded as "native vegetation". I accept that fringing areas outside the proposed hazard management area are

"native vegetation" (which I have mapped as DPU). I also accept that there are some native species within the hazard management area. For the record, I believe that council have previously accepted the concept of TASVEG's modified land mapping units as not comprising "native vegetation" within the intent of the *Scheme*.

On the basis of the above review, I do not believe that E10.2.1 has application i.e. the Code is not applicable. However, in my experience, this is unlikely to be the interpretation of the planning authority such that the balance of the Code provisions are reviews.

The application requirements under the Biodiversity Code are stated below:

> E10.5 Application Requirements
>
> E10.5.1
>
> In addition to any other application requirements, the planning authority may require the applicant to provide a natural values determination if considered necessary to determine compliance with acceptable solutions.
>
> E10.5.2
>
> In addition to any other application requirements, the planning authority may require the applicant to provide any of the following information if considered necessary to determine compliance with performance criteria:
>
> (a) a natural values determination;
>
> (b) a natural values assessment;
>
> (c) a report detailing how impacts on priority biodiversity values will be avoided, minimised, and/or mitigated;
>
> (d) a special circumstances justification report;
>
> (e) a biodiversity offsets plan.
>
> A "natural values assessment" (a higher level of assessment than a "natural values determination") is defined as:
>
> "an ecological assessment, generally consistent with the *Guidelines for Natural Values Assessments* (DPIPWE July 2009), by a suitably qualified person (biodiversity) to identify and convey:
>
> (a) the location of priority biodiversity values affecting the site;
>
> (b) the significance of priority biodiversity values, with particular reference to Table E10.1;
>
> (c) any likely impact on these priority biodiversity values including existing activities on the site, nearby land uses, weeds, pests, pathogens and the degree of connectivity with other land with natural values;
>
> (d) the likely impact of the proposed development or use on these priority biodiversity values;
>
> (e) recommendations for the design and siting of the proposed development or use to avoid or minimise the identified impacts;
>
> (f) recommendations for the mitigation or management of any residual impacts.

The preceding report on the natural values and this review of the provisions of the Biodiversity Code should meet the intent and specifics of a "natural values assessment" or "natural values determination" under the Biodiversity Code.

However, prior to considering the relevant development standards, I refer to E10.4.1, which is stated as follows:

> E10.4 Development Exempt from this Code
>
> E10.4.1
>
> The following development is exempt from this code:

(e) fire hazard management works for an existing dwelling in accordance with a bushfire hazard management plan endorsed by an accredited person as defined under the Bushfire Prone Areas Code, wherein the extent of clearance and conversion and disturbance is the minimum necessary for adequate protection from bushfire;

In my opinion, this is open to little interpretation. The dwelling is clearly "existing" and therefore it should not be relevant if the proposal is for a minor or major extension. Further, there will be a "bushfire hazard management plan endorsed by an accredited person as defined under the Bushfire Prone Areas Code" and this is recommending a BAL-19 standard be applied, which I believe meets the intent of the "extent of clearance and conversion and disturbance is the minimum necessary for adequate protection from bushfire". That is, I believe that the proposal is exempt under E10.4.1(e). I am well aware that this is unlikely to be the interpretation of the planning authority such that I examine the balance of the Code provisions below.

In my opinion, two other exemption clauses may also be applicable to parts of this project site, notably trees below or adjacent to the powerlines and trees adjacent the boundary fence, the clauses noted as follows:

E10.4 Development Exempt from this Code

E10.4.1

The following development is exempt from this code:

(k) works necessary to make safe power lines or for the maintenance, repair, upgrading or replacement of such infrastructure;

(l) works for the purpose or erecting or maintaining a boundary fence:

(ii) within 2 m of a boundary line if in other zones.

In this case, it may be prudent to show the extent of the powerline "easement" on any relevant site plans to indicate the application of E10.4.1(k). It may also be useful to cross-reference to Table 1 that indicates those trees I measured as having their trunks within 2 m of the boundary fence – confirming the status of some of these trees by an assessment by a suitably qualified arborist may be prudent.

The Development Standards for Buildings and Works have the following objective:

E10.7 Development Standards

E10.7.1 Buildings and Works

Objective:

To ensure that development for buildings and works that involves clearance and conversion or disturbance within a Biodiversity Protection Area does not result in unnecessary or unacceptable loss of priority biodiversity values.

This is a difficult objective to meet in literal terms because it is subjective and terms such as "unnecessary" and "unacceptable" are not defined, particularly in relation to a proposed use that is acceptable under the zoning. See also previous consideration of E10.4.1 ("application") and E10.4.3 ("exemptions").

However, given that the development is for an extension to an existing dwelling in an already highly modified context and that only a small number of individual trees will be removed or impacted, this should be considered a satisfactory outcome that meets the intent of not resulting in "unnecessary or unacceptable loss of priority biodiversity values".

The Acceptable Solution is stated as:

A1

Clearance and conversion or disturbance must be within a Building Area on a plan of subdivision approved under this planning scheme.

To the best of my knowledge, A1 is not satisfied because there is not a building area shown on title.

To address the Performance Criteria, it is necessary to categorise the significance of the "priority biodiversity values" present as "low", "moderate" or "high", as the category affects the manner in which the criteria are addressed.

"High priority biodiversity values" are defined as (taken from Table E10.1 with author commentary below each):

> Native vegetation communities listed as threatened under the *Nature Conservation Act 2002*.

The title supports DPU, FPE & FUR, which do not equate to listed communities. That is, this component of high priority biodiversity value is not present.

> Significant habitat for and/or areas known to contain threatened species listed under the *Threatened Species Protection Act 1995* or the *Environment Protection and Biodiversity Conservation Act 1999* that are:
>
> (a) recognised as endangered or vulnerable; or
>
> (b) largely confined in their total distribution to the municipal area; or
>
> (c) have most of their range within the municipal area.

"Significant habitat" is defined under the *Scheme* as:

> "Native vegetation determined from published literature and/or agreed by the Threatened Species Section (DPIPWE) in consultation with species specialist, and/or endorsed by the Threatened Species Scientific Advisory Committee (TSSAC) as habitat within the range of a threatened or vulnerable flora or fauna species that: (i) is known to be of high priority for the maintenance of breeding populations throughout the species' range; and/or (ii) if converted to non-native vegetation is considered to result in a long term negative impact on breeding populations of the species. It may include areas that do not currently support breeding populations of the species but that need to be maintained to ensure the long-term future of the species".

In relation to threatened flora, the title does not support populations of threatened flora listed as endangered or vulnerable on the Tasmanian *Threatened Species Protection Act 1995* and/or the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* nor potential habitat of such species in any reasonable sense.

In relation to threatened fauna, the title provides ubiquitous potential habitat for species such as the Tasmanian devil, spotted-tailed quoll, eastern quoll and eastern barred bandicoot but the preceding report has demonstrated that it is not reasonable to consider the title as "significant" for these species at any logical level. It is challenging to suggest that individual trees in this context should be considered as "significant habitat" at any reasonable scale.

> Native vegetation communities with a distribution on a bioregional basis having contracted to less than 10% of its former area.

Not applicable – there will be no impact to native vegetation communities.

> Native vegetation communities with a total area on a bio-regional basis generally being less than 1,000 ha.

Not applicable – there will be no impact to native vegetation communities.

> Remnants occurring on land systems components which have been more than 90% cleared of their native vegetation.

Not applicable – the site is already highly modified and there will be no impact to native vegetation communities

"Moderate priority biodiversity values" are defined as (taken from Table E10.1 with author commentary below each):

> Significant habitat for and/or areas known to contain threatened species listed under the *Threatened Species Protection Act 1995* or the *Environment Protection and Biodiversity Conservation Act 1999* that are:
>
> (a) recognised as rare; and
>
> (b) are not specific to the municipal area.

Of the threatened fauna species identified as potentially present (albeit very marginally so), only the spotted-tailed quoll is listed as "rare" but this species has a landscape-scale distribution and the site did not support particular habitat elements strongly associated with the species. No species recognised as specific to the municipal area have been identified.

> Potential habitat for threatened species listed under the *Threatened Species Protection Act 1995* or the *Environment Protection and Biodiversity Conservation Act 1999*.

"Potential habitat" is defined under the *Scheme* as:

> "All vegetation types within the potential range of a threatened flora or fauna species that are likely to support that species in the short and/or long term. It may not include habitats known to be occupied intermittently. Potential habitat is determined from published and unpublished scientific literature and/or via expert opinion, is agreed by the Threatened Species Section (DPIPWE) in consultation with species specialist, and/or endorsed by the Threatened Species Scientific Advisory Committee (TSSAC) under the Threatened Species Protection Act 1995".

In relation to threatened flora, the title does not support potential habitat of threatened flora in any reasonable sense (and no such species were recorded).

Because this definition of "potential habitat" now includes the extremely nebulous concept of "…likely to support that species in the short and/or long term", it becomes almost impossible to discount any area of "native vegetation" (however intact or modified), or even many patches of modified land such as pasture, regenerating cleared land, plantations, etc., within the municipality as not being "moderate priority biodiversity value", which is clearly not the intent. The definition does, however, include the concept of "may not include habitats known to be occupied intermittently", which means species such as the Tasmanian devil, spotted-tailed quoll, eastern quoll, eastern barred bandicoot, grey goshawk, masked owl, wedge-tailed eagle, blue-winged parrot, forty-spotted pardalote and swift parrot that may "pass through" (but not permanently occupy) the site would not qualify the site as "moderate priority biodiversity value".

In my opinion, it is very hard to qualify the site as supporting potential habitat of threatened fauna at any reasonable scale that would qualify it as moderate priority biodiversity value.

> Native vegetation communities approaching a reduction in areal extent of 70% within a bioregional context.

Not applicable – there will be no impact to native vegetation communities.

> Other priority species that are not listed but are considered of conservation significance in the municipal area.

"Priority species" are defined under the *Scheme* as:

> "…non-listed taxa identified in the Tasmanian RFA (Commonwealth of Australia and State of Tasmania 1997, as amended) as requiring some of form or protection or further research, non-listed species identified as poorly reserved in Tasmania, type locations and edge-of-range populations".

The title does not support such values. None of the RFA-listed non-listed taxa are present (note that the RFA has essentially been updated such that the list of priority species is now consistent

with formally legislated lists). Poorly-reserved species have attempted to be defined and described at various times by DPIPWE (NRE Tas) but the lists are of limited value because they lack rigour and rely on out-of-date data. This means that "poorly-reserved" taxa are best considered on a case-by-case basis by a suitably qualified person in relation to a specific development proposal and/or site. The title does not include any species that could reasonably be categorised as poorly-reserved. The title does not support any type locations of any taxa. The parts of the titles proposed for development do not include any edge-of range populations of any taxa. Note that *Eucalyptus rubida* (candlebark) is now also considered as a priority species by the planning authority: this species is not present (see extensive discussion on the classification of "white gums").

High conservation value trees.

The *Scheme* defines a "high conservation value tree" as:

> "a tree that is of a species that is listed in the *Threatened Species Protection Act 1995* or the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) and/or provide potential or significant habitat for a threatened species listed in either of those acts".

The tree species present within the title and on its immediate fringes are not listed as threatened on either of the mentioned acts (Table 1). In this scenario, I do not believe that there are any trees present that "provide potential or significant habitat for a threatened species" at any reassemble scale (but see further discussion below)

The usual interpretation of the planning authority of "high conservation value trees" under Table E10.1 is by reference to *Kingborough Biodiversity Offset Policy 6.10, Nov. 2023*. By reference to this, in this context (modified setting), any tree over 70 cm diameter at breast height (DBH) will qualify as a very high conservation value tree because of the potential importance (existing or future) for hollow-dwelling species and any *Eucalyptus viminalis* (white gum) with a DBH over 25 cm will qualify as high conservation value (those over 70 cm DBH already qualify as very high conservation value) due to site being "within 5,000 m of significant forty-spotted pardalote habitat or within potential forty-spotted pardalote habitat" (the nearest "significant habitat" being along Coffee Creek ca. 3-4 km away). In this case, I have classified the smaller "white gums" on the site as *Eucalyptus dalrympleana*, such that this category is not relevant.

The most usual course taken by the planning authority is to require a "tree plan" (as per their issued guidelines) that provide a map of all trees over 25 cm DBH, numbered, identified to species and DBH measured for comparison to the table in the *Kingborough Biodiversity Offset Policy 6.10, November 2023*. In this case, refer to Table 1 & Figure 13 that has been produced satisfying the guidelines in full. In this case, it is recommended that the final site plans show all very high conservation value trees and their respective Tree Protection Zones (TPZs) relative to all project elements (including the final hazard management area) be submitted as part of the response to the request for further information. Maps included in the present report should be considered indicative only. It may be prudent to provide an assessment by a suitably qualified arborist to support the removal of any very high conservation value trees (or indeed any of the trees, including those already close to the existing structures and boundary fences).

"Low priority biodiversity values" are defined as (taken from Table E10.1 with author commentary below each):

All other native vegetation communities.

This would be applicable to areas mapped as DPU but these are outside the hazard management area such that low priority biodiversity values are not technically present.

On the basis of the above analysis, moderate priority biodiversity values in the form of individual trees are present.

The Performance Criteria for moderate priority biodiversity values are stated as:

> P1
>
> Clearance and conversion or disturbance must satisfy the following:
>
> (b) if moderate priority biodiversity values:
>
> (i) development is designed and located to minimise impacts, having regard to constraints such as topography or land hazard and the particular requirements of the development;
>
> (ii) impacts resulting from bushfire hazard management measures are minimised as far as reasonably practicable through siting and fire-resistant design of habitable buildings
>
> (iii) remaining moderate priority biodiversity values on the site are retained and improved through implementation of current best practice mitigation strategies and ongoing management measures designed to protect the integrity of these values;
>
> (iv) residual adverse impacts on moderate priority biodiversity values not able to be avoided or satisfactorily mitigated are offset in accordance with the Guidelines for the use of Biodiversity Offsets in the local planning approval process, Southern Tasmanian Councils Authority, April 2013 and Kingborough Biodiversity Offset Policy 6.10, November 2023.

In relation to P1(b)(i), in my opinion this will be achieved by reference to the fact that the proposal is for an extension to an existing dwelling.

In relation to P1(b)(ii), a bushfire hazard management plan certified by an accredited practitioner should satisfy this requirement.

In relation to P1(b)(iii), this is not relevant as the balance of what may be construed as moderate priority biodiversity values on the site will not be affected by the proposal and will simply remain "as is".

In relation to P1(b)(iv), this is in relation to some trees classified as very high conservation value, which may require removal, which means they will be subject to the provisions of *Kingborough Biodiversity Offset Policy 6.10, Nov. 2023*. In this case, a financial offset on a per tree basis is the most appropriate offset mechanism.

Based on the above review, the proposed development should meet the intent and specifics of P1(a) of E10.7.1 of the Biodiversity Code in relation to moderate priority biodiversity values with conditions related to very high conservation value trees to be applied through the *Kingborough Biodiversity Offset Policy 6.10, Nov. 2023* on a per tree basis.

Consideration of Scenic Landscapes Code provisions

The Scenic Landscapes Code has the following application:

> E14.2 Application
>
> E14.2.1 This code applies to development on land defined within this Code as either of the following:
>
> (a) a Scenic Landscape Area;
>
> (b) a Scenic Landscape Corridor;
>
> This code does not apply to use.

That is, the Code has possible application. However, the development appears to be exempt from the Code as follows:

E14.4 Development Exempt from this Code

E14.4.1 The following development is exempt from this code:

(a) if in a Scenic Landscape Area:

(ii) planting, clearing or modification of vegetation within a private garden, public garden or park, national park or State-reserved land

provided the vegetation is not protected by a permit condition, an agreement made under Part 5 of the Act or a covenant in gross.

In this case, I have classified the site as urban areas (TASVEG code: FUR), characterising it simply as a modified residential yard, very much managed as a "private garden" with chickens, storage, car parking areas, children play areas, etc. That is, I believe that the proposal is exempt under E14.4.1(a). I am well aware that this is unlikely to be the interpretation of the planning authority such that I examine the balance of the Code provisions below.

Below I consider the most relevant provision of the Code with respect to "natural values" (noting that I cannot comment on landscape management per se), which is as follows:

E14.7.1 Removal of Bushland within Scenic Landscape Areas

Objective: To ensure that removal or disturbance of bushland does not cause an unreasonable change to, or have an unreasonable adverse impact on, the scenic landscape value of Scenic Landscape Areas.

Acceptable Solutions

A1

Removal or disturbance of bushland must comply with both of the following:

(a) be on land no less than 50 m (in elevation) from a skyline;

(b) be no more than 500 m^2 in extent.

While I am not a qualified landscape planner, a cursory examination of topographic maps and site assessment indicates very clearly that no part of the site proposed for development will "be on land no less than 50 m (in elevation) from a skyline", such that A1(a) is satisfied.

No native vegetation per se will be impacted such that in principle, A1(b) should be satisfied by default. It is noted that no part of the proposed HMA is reasonably construed as "bushland" ("land which is dominated by native vegetation"). That is, E14.7.1 A1 is wholly satisfied.

Note that this statement does not constitute legal advice, and provides an interpretation of the provisions of the *Kingborough Interim Planning Scheme 2015*, which may not represent the views of Kingborough Council. It is recommended that formal advice be sought from the relevant agency prior to acting on any aspect of this report.

Please do not hesitate to contact me further if additional information is required.

Kind regards

Mark Wapstra

Senior Scientist/Manager

APPENDIX A. Images of sampled individuals of "dal-vim"

[cross-reference to Figure 13d]

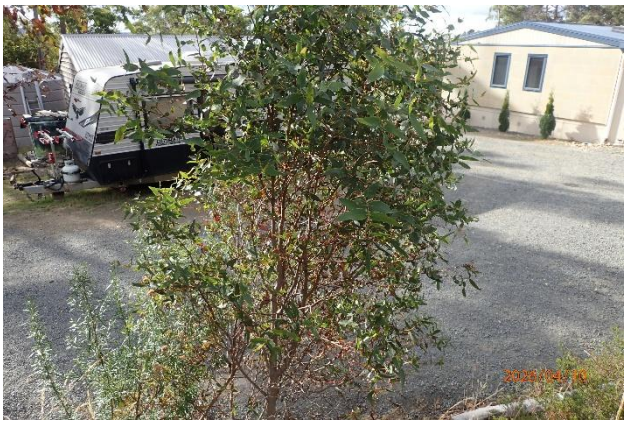
Examples of buds (LHS) and capsules of more mature "white gums" from within the hazard management area: note the umbels of three, indicating classification as part of the *Eucalyptus viminalis* series (but that separation of *E. viminalis* from *E. dalrympleana* is not possible from this type of material)

P1 – this material very clearly attributable to typical Tasmanian form of *E. dalrympleana*

P2 & P3 – this material very clearly attributable to typical Tasmanian form of *E. dalrympleana*

P4 – this material has closer affinities to *E. viminalis* (although somewhat more broad lanceolate than typical)

P6 – this material has affinities to *E. viminalis* (newest growth) but also *E. dalrympleana* (older growth) but this is a more intermediate specimen so not particularly diagnostic




P7 & P8 – intermediate specimen with closest affinities to *E. viminalis* (again, the intermediate form makes diagnosis challenging but the relatively narrow lanceolate leaves are more typical of *E. viminalis*)


P9 & P10 – another intermediate specimen but this time with youngest leaves with much closer affinities to *E. dalrympleana* (colour, broader lanceolate and some stem overlap)


P11, P12 & P13 – relatively young individual with typical broad lanceolate, dull grey-green and stem-overlapping leaves of *E. dalrympleana*


P14 & P15 – relatively young individual with typical broad lanceolate, dull grey-green and stem-overlapping leaves of *E. dalrympleana*

P16 & P17 – epicormic growth from one of the larger "white gums" near the boundary fence clearly showing the typical broad lanceolate, dull grey-green and stem-overlapping leaves of *E. dalrympleana*

P18 – epicormic growth from one of the larger "white gums" near the boundary fence clearly showing the typical broad lanceolate, dull grey-green and stem-overlapping leaves of *E. dalrympleana*

P19 – coppice growth from tree near boundary fence (in open) showing intermediate affinities to *E. viminalis* and *E. dalrympleana*

P20 & P21 – epicormic growth from one of the larger "white gums" near the boundary fence clearly showing the typical broad lanceolate, dull grey-green and stem-overlapping leaves of *E. dalrympleana*

P22 & P23 – epicormic growth from one of the larger "white gums" near the boundary fence clearly showing the typical broad lanceolate, dull grey-green and stem-overlapping leaves of *E. dalrympleana*

P24 – epicormic growth from one of the larger "white gums" near the boundary fence clearly showing the typical broad lanceolate, dull grey-green and stem-overlapping leaves of *E. dalrympleana*

P25 & P26 – coppice growth from individual in open area showing the braod lanceolate to ovate leaves typical of *E. dalrympelana*, also showing the grey-green colour and stem-overlapping (note that this specimen is very far removed from typical *E. rubida* due to lack of glaucousness, crenulate leaf margins and small ovate leaves)

P27 – epicormic growth from tree near boundary fence showing intermediate affinities to *E. viminalis* and *E. dalrympleana* (perhaps closest to the latter)

P28 – one of the only examples of "good" *E. viminalis*, although specimen is a later stage intermediate and growing in the open

P29 – coppice growth (plant in open) with affinities to both *E. viminalis* and *E. dalrympleana*

P30 – epicormic growth showing intermediate affinities to *E. viminalis* and *E. dalrympleana* (perhaps closest to the latter)

P31 – coppice growth with affinities to *E. viminalis* ad *E. dalrympleana* (perhaps closest to the latter)

P32 – epicormic growth showing intermediate affinities to *E. viminalis* and *E. dalrympleana* (perhaps closest to the latter)

P33 & P34 – coppice growth (plant in open) clearly attributable to *E. dalrympleana*